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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,537	11/13/2003	David Charles Boutcher	ROC920030208US1	9180
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EXAMINER				
SEYE, ABDOUK				
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10/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/712,537

Applicant(s)

BOUTCHER ET AL.

Examiner

Abdou Karim Seye

Art Unit

2194

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-12, 25, 29-32, 35-40, 43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-12, 25, 29-32, 35-40 and 43-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 3-12, 25, 29-32, 35-40 and 43-44 are pending in this application.

Drawing objection.

2. "Fig. 1" is objected to since, it appears to be a prior art, since only that which is old is shown not the inventive subject matter. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

4. Claims 1, 3-5, 7, 25, 29-31 and 35, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following terms lack antecedent basis:

- (i) " the second operating system" , Claim 2.

B. The following claims language is unclear and indefinite:

- (i) As per claim 1, line 5, it is cited " sending a pause message " it is unclear who is the recipient of the pause message (ie, the processor or the first operating system)" . line 6, it is cited "one other operating system" it is unclear whether the first operating system become other operating system or switch from first operating system to second operating system (i.e. How many different OS in the system?) Lines 8 and 9, it is uncertain what the relationship is between " each other operating system " and "at least other operating system" in line 6 (i.e. Are they the same one or different one? If they are the same, the same term should be used though out the claims, and should include "the or said").
- (ii) As per claim 3, line 2 it is cited "the second operating system ". It is unclear what's the relationship is between "the second OS" and "at least one other operating system" (i.e. Is the second OS part of the at least one other operating system?).
- (iii) As per claims 7 and 35, line 1, it is cited " a plurality of operating systems ". It is unclear whether the "plurality" of operating systems includes the first and second operating system or not .
- (iv) As per claim 25, line 2, it is cited "sending a pause message" it is unclear who is the recipient of the pause message (i.e. the processor or the first operating system) . line 3, it is cited "one other operating system" it is unclear whether the first operating system become other operating system or switch from first operating system to second operating system (i.e. How many different OS in the system?) Line 5, it is uncertain what the relationship is between " each other operating system " and "at least other operating system" in line 6 (i.e. Are they the same one or different one? If they are the

same, the same term should be used though out the claims, and should include "the or said").

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

6. Claims 25, 29-32, 35-40 and 44, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. Claims 25, 32, 40 and 44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a computer program product that is not stored and executed by a processor. Applicant may choose to change the claims language "bearing" to "storing". In addition the claim are directed to a signal directly or indirectly by claiming a "recordable media" and the Specification recites evidence (page 9, lines 5-8) where the "recordable media" is defined as a "wave" (such as carrier wave) . In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
9. Claims 1, 5, 6-8, 11, 25, 31-32, 35-36 and 39, are rejected under 35 U.S.C. 103 (a) as being unpatentable over constant et al. (US 6226694) in view of Applicant Admitted Prior Art (AAPA).
10. As to claim 32, Constant teaches the invention substantially as claimed including a computer readable program product comprising:
- (A) a pause/resume mechanism that sends a pause message (col. 6, lines 20-25) and that sends a resume message when system need to be restarted (col. 7, lines 10-15) , and
- (B) recordable media bearing the pause/resume mechanism (col. 10 , lines 47; a memory).
11. Constant does not explicitly teach the system having first and second operating systems that dealing with the first operating system needs to be restarted.
12. Applicant admitted prior art (AAPA) discloses a system having first and second operating system that dealing with the first operating system needs to be restarted (specification page 2, lines 23-25 and page 3, lines 1-5).

13. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Constant's invention with AAPA's to provide a pause/resume mechanism that would send the pause message when a first operating system need to be restarted and also send the resume message after the first operating system is restarted. One would have been motivated to provide a process that would time the sending of pause/resume messages when and after a first operating system is restated in order to synchronize multiple data stores and to ensure that data consistency is maintained in a non-transactional multiprocessing computer system .
14. As to claim 35, AAPA teaches wherein a plurality of operating systems use the shared resource (specification, page 2, lines 2; "different computing environments" this claimed element meets the claimed limitation of the claim). Constant teaches the pause/resume mechanism sends the pause message and the resume message (col. 6, lines 20-25; col. 7, lines 10-15)
15. As to claim 36, Constant teaches wherein the pause/resume mechanism receives a pause complete message from the second operating system to indicate the second operating system has completed pending accesses to the shared resource (col. 6, lines 33-40; pause complete).

16. As to claim 39, Constant teaches wherein the resume message indicates that the first operating system is ready to resume sharing the shared resource with the second operating system (col. 7, lines 20-25; resume complete).

17. As to claims 1, 6 and 25, Constant teaches the invention substantially as claimed including a system comprising:

at least one processor (FIG. 5/ 506; col. 10, lines 24-25; wherein the claimed element " 506" is the processor);

a memory coupled to the at least one processor (col. 10, lines 47;memory);

a pause/resume mechanism executed by the at least one processor (530, FIG. 7; col. 9, lines 38-67) ,

the pause/resume mechanism sending a pause message (col. 9, lines 55-57) ,
the pause/resume mechanism receiving a pause complete message (col. 10, lines 5-10), and sending a resume message (col. 10, lines 60-62) .

18. Constant does not explicitly teach that the system having first and second operating systems, the first operating system share resource with other operating system wherein the first OS needs to be restarted.

19. Applicant admitted prior art (AAPA) discloses having first and second operating systems, the first operating system share resource with other operating system wherein the first OS needs to be restarted (specification, page 1, lines 16-22; page 2, lines 1-5, lines 15-20, 23 and page 3, lines 1-5).

20. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Constant's invention with AAPA's to provide a pause/resume mechanism that would send the pause message when a first operating system need to be restarted to the second OS that used the shared resource from first OS, and also send the resume message after the first operating system is restarted. One would have been motivated to provide a process that would time the sending of pause/resume messages when and after a first operating system is restated in order to synchronize multiple data stores and to ensure that data consistency is maintained in a non-transactional multiprocessing computer system.

21. As to claims 5, 11, 31, they are rejected for the same reasons as claim 39.

22. As to claims 7, it is rejected for the same reasons as claim 35 above.

23. As to claim 8, it is rejected for the same reasons as claim 36 above.

24. As to claim 11, it is rejected for the same reasons as claim 39 above.

25. Claims 3-4, 9-10, 29-30 and 37-38 are rejected under 35 U.S.C. 103 (a) as unpatentable over Constant et al. (US 6226694) in view of Applicant Admitted Prior Art (AAPA), as applied to claims 1, 6, 25 and 32 above, and further in view of Yu et al. (5483647).

26. As to claims 12, 37-38, Constant and AAPA failed to teach the pause/resume mechanism disconnects/reconnects the first operating system from the second operating system. Specifically, the first OS sending the disconnect/reconnect message to the second operating system.

27. Yu discloses a system that sending disconnects/reconnect message from the first operating system to the second operating system (Fig. 3b and 3d", col.11, lines 43-57 ; Fig. 3m and 3o, col. 14, lines 15-37).

28. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Constant, AAPA and Yu because the reconnect /disconnect message from Yu will improve the integrity of Constant and AAPA's system by allowing the other party be aware of the status of the connection line in order to improve system efficiency and terminal connectivity (Yu's, col. 14, lines 55-61).

29. As to claims 3-4, 9-10 and 29-30, they are rejected for the same reasons as the claims 37-38 above.

30. As to claims 40 and 43-44, they are rejected for the same reason as claims 12 above.

Conclusion

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdou Karim Seye whose telephone number is 571-270-1062. The examiner can normally be reached on Monday - Friday 8:30 - 6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

/Abdou Karim Seye/
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